Claims

The claims are amended as follows:

1. (Currently Amended) A system for navigating within a graphical user interface without using a pointing device, comprising:

a set of one or more keyboard shortcuts comprising at least one key, each keyboard shortcut specifying an action to perform within a graphical user interface which is executed upon input of each key in the keyboard shortcut and at least one key corresponding to a semantically-meaningful hyperlink within Web content, wherein at least one of the one or more keyboard shortcuts causes scrolling of the Web content to occur and fetching of additional web content when scrolling reaches a predetermined location in the Web content, and further wherein the Web content comprises at least one intervening hyperlink, and the at least one key corresponding to the semantically-meaningful hyperlink providing navigation to skip selection of the at least one intervening hyperlink; and

a Web browser providing navigation within the graphical user interface, comprising:

an output component providing the Web content on a view within the graphical user interface and including a graphical pointer indicating a location within the view; and

an input component intercepting at least one key input by a user and mapping the intercepted key to one keyboard shortcut, and executing the action specified by the keyboard shortcut and updating the view within the Web content relative to the graphical pointer.

2. (Original) A system according to Claim 1, further comprising:

a scrolling component scrolling the view within the Web content in a direction indicated by the intercepted key.

3. (Original) A system according to Claim 2, further comprising:

a control module scrolling to the view at variable speed.

4. (Original) A system according to Claim 1, further comprising:

a fetching component fetching the Web content corresponding to one of a next or previous Web page in a direction indicated by the intercepted key.

5.   (Original) A system according to Claim 1, further comprising:

a display area defined on the graphical user interface receiving outputted visualized Web content.

6.   (Original) A system according to Claim 1, further comprising:

at least one of a display area defined on the graphical user interface and a user input region receiving inputted user inputs.

7.   (Original) A system according to Claim 6, further comprising:

a keyboard device receiving textual user inputs.

8.   (Original) A system according to Claim 1, further comprising:

navigational groups of keyboard shortcuts, comprising at least one of:

a navigation group navigating to a selection within a Web page;

a retrieval group retrieving a Web page;

a caching group accessing at least one of a cached or similar Web page;

a sequence group accessing a next or previous Web page in a sequence;

a focus group moving a focus within the view to a user input region;

an enumerated group accessing one or more enumerated Web pages;

a hierarchy group accessing a previous Web page in a hierarchy; and

a help group accessing a help Web page.

9.   (Currently Amended) A method for navigating within a graphical user interface without using a pointing device, comprising:

defining a set of one or more keyboard shortcuts comprising at least one key, each keyboard shortcut specifying an action to perform within a graphical user interface which is executed upon input of each key in the keyboard shortcut, at least one key corresponding to a semantically-meaningful hyperlink within Web content, and at least one key corresponding to a cached copy of a Web page associated with the semantically-meaningful hyperlink, the cached copy provided by a search engine, wherein at least one of the one or more keyboard shortcuts causes scrolling of the Web content to occur and fetching of additional web content when scrolling reaches a predetermined location in the Web content; and

navigating within the graphical user interface, comprising:

provising the Web content on a view within the graphical user interface and including a graphical pointer indicating a location within the view;

intercepting at least one key input by a user and mapping the intercepted key to one keyboard shortcut; and

executing the action specified by the keyboard shortcut and updating the view within the Web content relative to the graphical pointer.

10.   (Original) A method according to Claim 9, further comprising:
scrolling the view within the Web content in a direction indicated by the intercepted key.

11.   (Original) A method according to Claim 10, further comprising:
scrolling to the view at variable speed.

12.   (Original) A method according to Claim 9, further comprising:
fetching the Web content corresponding to one of a next or previous Web page in a direction indicated by the intercepted key.

13.   (Original) A method according to Claim 9, further comprising:
outputting visualized Web content within a display area defined on the graphical user interface.

14.   (Canceled)

15.   (Original) A method according to Claim 9, further comprising:
inputting user inputs within at least one of a display area defined on the graphical user interface and a user input region.

16.   (Original) A method according to Claim 15, further comprising:
receiving textual user inputs via a keyboard device.

17.   (Original) A method according to Claim 9, further comprising:

defining navigational groups of keyboard shortcuts, comprising at least one of:

navigating to a selection within a Web page;

retrieving a Web page;

accessing at least one of a cached or similar Web page;

accessing a next or previous Web page in a sequence;

moving a focus within the view to a user input region;

accessing one or more enumerated Web pages;

accessing a previous Web page in a hierarchy; and accessing a help Web page.

18.   (Original) A computer-readable storage medium holding code for performing the method according to Claim 9.

19.   (Currently Amended) An apparatus for navigating within a graphical user interface without using a pointing device, comprising:

means for defining a set of one or more keyboard shortcuts comprising at least one key, each keyboard shortcut specifying an action to perform within a graphical user interface which is executed upon input of each key in the keyboard shortcut and at least one key corresponding to a semantically-meaningful hyperlink within Web content, wherein at least one of the one or more keyboard shortcuts causes scrolling of the Web content to occur and fetching of additional web content when scrolling reaches a predetermined location in the Web content, and further wherein the Web content comprises at least one intervening hyperlink, and the at least one key corresponding to the semantically-meaningful hyperlink providing navigation to skip selection of the at least one intervening hyperlink; and

means for navigating within the graphical user interface, comprising:

means for providing the Web content on a view within the graphical user interface and including a graphical pointer indicating a location within the view;

means for intercepting at least one key input by a user and mapping the intercepted key to one keyboard shortcut; and

means for executing the action specified by the keyboard shortcut and updating the view within the Web content relative to the graphical pointer.

20.   (Previously Presented) A system for providing keyboard-based graphical user interface navigation, comprising:

a graphical user interface comprising an output area displaying Web content and a user input region receiving user keyboard inputs;

a set of one or more keyboard shortcuts comprising at least one key available on a keyboard communicatively interfaced to the graphical user interface, each keyboard shortcut specifying an action to perform within the graphical user interface which is executed upon input of each key in the keyboard shortcut, at least one key corresponding to a semantically-meaningful hyperlink within the Web content, and at least one key corresponding to a cached copy of a Web page associated with the semantically-meaningful hyperlink, the cached copy provided by a search engine, wherein at least one of the one or more keyboard shortcuts causes scrolling of the Web content to occur and fetching of additional web content when scrolling reaches a predetermined location in the Web content; and

a Web browser interpreting keyboard shortcuts received from a user to navigate within the output area of the graphical user interface, comprising:

a view defined within the output area of the graphical user interface providing the Web content;

a graphical pointer navigable maintained within the output area and indicating a location within the view of the Web content; and

a keyboard shortcut module intercepting at least one key input by a user and mapping the intercepted key to one keyboard shortcut, and executing the action specified by the keyboard shortcut and updating the view within the Web content relative to the graphical pointer.

21.   (Original) A system according to Claim 20, further comprising:

at least one keyboard shortcut navigating to a selection within a Web page responsive to the intercepted key.

22.   (Original) A system according to Claim 20, further comprising:

at least one keyboard shortcut retrieving a Web page responsive to the intercepted key.

23.   (Original) A system according to Claim 20, further comprising:

at least one keyboard shortcut accessing at least one of a cached or similar Web page responsive to the intercepted key.

24.   (Original) A system according to Claim 20, further comprising:

at least one keyboard shortcut accessing a next or previous Web page in a sequence responsive to the intercepted key.

25.   (Original) A system according to Claim 20, further comprising:

at least one keyboard shortcut moving a focus within the view to a user input region.

26.   (Original) A system according to Claim 20, further comprising:

at least one keyboard shortcut accessing one or more enumerated Web pages responsive to the intercepted key.

27.   (Original) A system according to Claim 20, further comprising:

at least one keyboard shortcut accessing a previous Web page in a hierarchy responsive to the intercepted key.

28.   (Original) A system according to Claim 20, further comprising:

at least one keyboard shortcut accessing a help Web page responsive to the intercepted key.

29.   (Currently Amended) A method for providing keyboard-based graphical user interface navigation, comprising:

providing a graphical user interface comprising an output area displaying Web content and a user input region receiving user keyboard inputs;

defining a set of one or more keyboard shortcuts comprising at least one key available on a keyboard communicatively interfaced to the graphical user interface, each keyboard shortcut specifying an action to perform within the graphical user interface which is executed upon input of each key in the keyboard shortcut and at least one key corresponding to a semantically-meaningful hyperlink within the Web content, <u>wherein at least one of the one or more keyboard shortcuts causes scrolling of the Web content to occur and fetching of additional web content</u>

when scrolling reaches a predetermined location in the Web content, and further wherein the Web content comprises at least one intervening hyperlink, and the at least one key corresponding to the semantically-meaningful hyperlink providing navigation to skip selection of the at least one intervening hyperlink; and

interpreting keyboard shortcuts received from a user to navigate within the output area of the graphical user interface, comprising:

providing the Web content on a view within the output area of the graphical user interface;

maintaining a graphical pointer navigable within the output area and indicating a location within the view of the Web content;

intercepting at least one key input by a user and mapping the intercepted key to one keyboard shortcut; and

executing the action specified by the keyboard shortcut and updating the view within the Web content relative to the graphical pointer.

30. (Original) A method according to Claim 29, further comprising:

navigating to a selection within a Web page responsive to the intercepted key.

31. (Original) A method according to Claim 29, further comprising:

retrieving a Web page responsive to the intercepted key.

32. (Original) A method according to Claim 29, further comprising:

accessing at least one of a cached or similar Web page responsive to the intercepted key.

33. (Original) A method according to Claim 29, further comprising:

accessing a next or previous Web page in a sequence responsive to the intercepted key.

34. (Original) A method according to Claim 29, further comprising:

moving a focus within the view to a user input region.

35. (Original) A method according to Claim 29, further comprising:

accessing one or more enumerated Web pages responsive to the intercepted key.

36.　(Original) A method according to Claim 29, further comprising:

accessing a previous Web page in a hierarchy responsive to the intercepted key.

37.　(Original) A method according to Claim 29, further comprising:

accessing a help Web page responsive to the intercepted key.

38.　(Original) A computer-readable storage medium holding code for performing the method according to Claim 29.

39.　(Currently Amended) An apparatus for providing keyboard-based graphical user interface navigation, comprising:

means for providing a graphical user interface comprising an output area displaying Web content and a user input region receiving user keyboard inputs;

means for defining a set of one or more keyboard shortcuts comprising at least one key available on a keyboard communicatively interfaced to the graphical user interface, each keyboard shortcut specifying an action to perform within the graphical user interface which is executed upon input of each key in the keyboard shortcut, at least one key corresponding to a semantically-meaningful hyperlink within the Web content, and at least one key corresponding to a cached copy of a Web page associated with the semantically-meaningful hyperlink, the cached copy provided by a search engine, wherein at least one of the one or more keyboard shortcuts causes scrolling of the Web content to occur and fetching of additional web content when scrolling reaches a predetermined location in the Web content; and

means for interpreting keyboard shortcuts received from a user to navigate within the output area of the graphical user interface, comprising:

means for providing the Web content on a view within the output area of the graphical user interface;

means for maintaining a graphical pointer navigable within the output area and indicating a location within the view of the Web content;

means for intercepting at least one key input by a user and mapping the intercepted key to one keyboard shortcut; and

means for executing the action specified by the keyboard shortcut and updating the view within the Web content relative to the graphical pointer.